REMARKS

Reconsideration and allowance of the present application are respectfully requested based on the foregoing amendments and the following remarks.

As an initial matter, the Applicant gratefully acknowledges that the petition to change inventorship has been accepted and that the Information Disclosure Statement of December 18, 2000, has been received and considered. Although the Applicant's representative has received an initialed copy of the Form 1449 accompanying that Information Disclosure Statement, an initialed copy of the IDS Letter citing U.S. Appln. No. 09/371,220 has not been received. The Examiner is requested to return an initialed copy of the IDS Letter to the undersigned.

In the final Official Action, the Examiner rejected claim 1 as being obvious in view of the combination of David and Wells. In response to that rejection, claim 1 has been amended to incorporate the subject matter recited by claim 2. Specifically, claim 1 has been amended to recite that the arcuate portion is "defined along at least one arc having a center of curvature located below said blade when said hacksaw is oriented in an upright position with the cutting edge of the blade facing downwardly[.]" This claimed configuration provides the frame member with a superior resistance to permanent setting or fatiguing due to deflection under blade tension. For the reasons set forth below, the Applicant submits that the Examiner has failed to establish the prima facie case of obviousness against claim 1, and respectfully requests the Examiner to reconsider this rejection.

As set forth in M.P.E.P. §2143, to establish a prima facie case of obviousness, the Examiner must meet three basic criteria:

1. There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

2. There must be a reasonable expectation of success.

3. The prior art reference (or references when combined) must teach or suggest all the claim limitations.

In the present application, the Applicant submits that the Examiner has failed to establish at least the third prong of the prima facie case of obviousness. Specifically, the Examiner has failed to cite any evidence on the record that teaches or suggests a hacksaw frame member having an arcuate portion that is "defined along at least one arc having a

center of curvature located below said blade when said hacksaw is oriented in an upright position with the cutting edge of the blade facing downwardly[.]"

The Examiner relies on the combination of David and Wells as rendering the subject matter of claim 1 obvious. Specifically, the Examiner cites David as disclosing the basic concept of a hacksaw with a frame constructed in an I-beam configuration with upper and lower end caps. The frame in David, however, has a sharp bend towards the front end thereof. As a result, when the blade is tensioned so as to apply a rearwardly directed load to the front end of the frame, the bending moment created in the frame member is focused at that sharp bend. The Examiner cites Wells as disclosing a hacksaw with an arcuate frame member. However, the frame member is tubular and does not have an I-beam configuration. In the outstanding Official Action, the Examiner asserted that "it would have been obvious to one having ordinary skill in the art to provide the frame member of David with the claimed arcuate portion for providing an efficient design along with the other well known benefits described above as well as those taught by Wells."

After summarizing the relevant teachings of David and Wells with respect to claim 1, the Examiner stated with respect to the dependent claims (which includes then pending claim 2, which is now incorporated into amended claim 1):

> Further, the specifics of the arcuate portion as defined in the dependent claims would be the mere discovery of the optimum or workable ranges within the general conditions of the prior art by routine experimentation and therefore obvious to one having ordinary skill in the art.

Under the three-pronged obviousness test set forth above, the third prong requires the Examiner to establish that that prior art teaches or suggests all the claimed limitations. See In re Fine, 837 F.2d 1072 (Fed. Cir. 1988) (holding that Board of Patent Appeals & Interference erroneously upheld rejection of claims where prior art references failed to disclose a material limitation of the claims); see also M.P.E.P. §2143.03. Further, the Examiner is required to cite evidence, either in the references themselves or in the knowledge generally available to one skilled in the art, to support such an assertion that the prior art teaches or suggests all the claimed limitations. See In re Werner Kotzab, No. 99-55 USPQ2d 1313 (Fed. Cir. June 30, 2000). M.P.E.P. §2144.03 provides that the "rationale supporting an obviousness rejection may be based on common knowledge in the art or 'well-known' prior art." However, this section does not relieve the Examiner of his obligation to

support such assertions by objective evidence if challenged by the Applicant. In Application of Albert, the CCPA stated:

> Assertions of technical facts in areas of esoteric technology must always be supported by citation to some reference work recognized as standard in the pertinent art and the appellant given, in the Patent Office, the opportunity to challenge the correctness of the assertion or the notoriety or repute of the cited reference. . . . Allegations concerning specific "knowledge" of the prior art, which might be peculiar to a particular art should also be supported and the appellant similarly given the opportunity to make a challenge. 424 F.2d 1088, 1091 (1970) (citations omitted).

Assuming for the sake of argument that one were motivated to combine David and Wells, the resulting construction would have a profile similar to that disclosed in Wells, which has an arcuate bend with a relative small radius, which radius has a radius of curvature located above the blade. In direct contrast, claim 1 as amended requires its frame member to have an "arcuate portion defined along at least one arc having a center of curvature located below said blade[.]" However, beyond the conclusory statement quoted above, the Examiner has not cited any evidence showing a teaching or suggestion of this claim limitation.

In the previous Amendment dated November 2, 2000, the Applicant's representative challenged the Examiner's allegation of obviousness against claim 2, which is now incorporated into claim 1, by asserting that the Examiner failed to establish the prima facie case of obviousness with respect to the dependent claims. In response, the Examiner stated in the outstanding Official Action:

> In the text bridging pages 5 and 6 of the amendment regarding claims 2-9, applicant argues that "Examiner has failed to show by evidence that the subject matter of these dependent claims would be obvious.["] The Examiner respectfully disagrees with applicant's statement as best understood. Many of the limitations of claims 2-9 are taught by David or the combination of David in view of Wells '653, and all are either taught or suggested by the combination, and applicants have not specifically indicated which claim limitations are not either taught or suggested by the prior art.

The Applicant submits that this is a misunderstanding of the procedural law underlying the prima facie case of obviousness. The law does not require the Applicant to establish that the prior art lacks a teaching or suggestion of certain claim limitations. Instead, the law requires the Examiner to establish the prima facie case of obviousness by citing evidence showing the three elements set forth above, including a showing by evidence that

all the claim limitations are taught or suggested by the prior art. As discussed above, this has not been done.

Viewing the record as a whole, the record, at most, contains a single conclusory statement to the effect that the configuration of claim 1's hacksaw frame could be achieved by "routine experimentation." However, as discussed above the law clearly sets a higher burden for the Examiner to meet in establishing the prima facie case of obviousness. Accordingly, it is submitted that the Examiner has failed to meet his prima facie burden under §103 with respect to claim 1 and withdrawal of the §103 rejection is respectfully requested.

Additionally, attached is a Rule 132 Declaration executed by Mr. Russell H. Powers attesting to the performance characteristics of the claimed construction. As can be seen from the Declaration, the hacksaw of the invention is far superior to the other commercially available hacksaws tested in terms of both deflection and permanent set. The Examiner is requested to take this Declaration into account.

The remaining claims all depend from claim 1. These dependent claims are each submitted to be patentable not only for the reasons advanced above with respect to claim 1, but for the reason that they each recite additionally patentable features. The Examiner's attention is drawn specifically to claims 3-9, which recite further details of the configuration of the arcuate hacksaw frame member recited in claim 1. The subject matter recited by each of these claims is believed to be advantageous and separately patentable over the subject matter of claim 1. Further, it is submitted that the Examiner has failed to establish a prima facie case of obviousness against any of these claims for the same reasons advanced above.

The Examiner also rejected claim 1 under the doctrine of obviousness type double-patenting over commonly owned U.S. Design Patent No. 403,224 in view of Hepworth. In the last Official Action, the Applicant pointed out that, although the claims of the present application, if issued, would cover the hacksaw disclosed in the '224 patent, the claim scope defined by the '224 Design patent is different in scope than the claim scope defined in the present application. Specifically, the claims of the present application could cover hacksaws that are not specifically covered by the design claimed in the '224 Design patent. The inquiry for establishing a double-patenting type obviousness rejection is whether the claims of the application recite an obvious variation of the claims set forth in the issued patent. Because the claims of the present application are not limited to the ornamental

appearance of a hacksaw, and instead are directed to the structure of the hacksaw frame member without regard to the specifics of its ornamental appearance, it is submitted that the claims of the present application are not obvious variations of the claim of the '224 Design patent. Accordingly, withdrawal of the double-patenting rejection is respectfully requested.

In view of the foregoing, the claims are now believed to be in form for allowance, and such action is hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, he is kindly requested to contact the undersigned at the telephone number listed below.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached Appendix is captioned **"Version with markings to show changes made".**

All objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,

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Enclosure: Appendix

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

1. (Twice Amended) A low profile hacksaw comprising:

an elongated blade having opposing longitudinal end portions and a cutting edge between said longitudinal end portions;

a hacksaw frame assembly comprising a rigid I-beam frame member with upper and lower end caps and a generally vertical web member extending therebetween, said frame member having a forward end portion, a maximum height portion, and an arcuate portion defined along at least one arc having a center of curvature located below said blade when said hacksaw is oriented in an upright position with the cutting edge of the blade facing downwardly, said arcuate portion extending substantially the entire length between said forward end portion and the maximum height portion and curving downwardly and forwardly towards said forward end portion to provide said hacksaw with a lower overall height at the forward end portion of said frame member than at the maximum height portion, said maximum height portion being defined at the point where both the distance between said blade and said lower end cap is a maximum and the arcuate portion begins its downward and forward curvature;

a first blade mounting structure carried by the hacksaw frame assembly, one of said longitudinal end portions of said blade being removably mounted on said first blade mounting structure;

a releaseable blade tensioning device carried by the hacksaw frame assembly and providing a second blade mounting structure on which the other of said longitudinal end portions of said blade is removably mounted, said blade tensioning device being movable to (a) affect relative tensioning movement between said first and second blade mounting structures to tension said blade in the longitudinal direction thereof, and (b) to affect relative releasing movement between said first and second blade mounting structures to release the tension to allow for removal and replacement of said blade;

one of said first and second blade mounting structures being provided on said forward end portion of said frame member such that the tension in said blade caused by the relative tensioning movement of said blade mounting structures applies a rearwardly directed load to

said forward end portion to create a bending moment which is distributed along said arcuate portion with said upper end cap along said arcuate portion being subject to tension and said lower end cap along said arcuate portion being subject to compression so that said upper and lower end caps cooperate to resist deflection of said frame member; and

said hacksaw frame assembly further comprising a manually engageable handle connected to said frame member for being manually grasped to enable performance of a cutting operation wherein the cutting edge of the tensioned blade is engaged with a work piece and moved forwardly and rearwardly to cut the work piece.

3. (Amended) A low profile hacksaw according to claim [2]1, wherein the lower end cap of said I-beam frame member extends arcuately from a rearward end portion of said frame member to the forward end portion of said frame member along a portion of the circumference of a first imaginary circle having a first centerpoint located below said blade, said maximum height portion being defined at said rearward end portion;

said upper end cap of said I-beam frame member extending arcuately from the rearward end portion of said frame member to the forward end portion of said frame member along a portion of the circumference of a second imaginary circle having a second centerpoint located below said blade.

16. (Amended) A hacksaw according to claim [2]1, wherein said at least one arc comprises only one arc which extends substantially the entire length of said arcuate portion.

17. (Amended) A low profile hacksaw according to claim [2]1, wherein said handle is formed integrally with said frame member as a one-piece construction with said frame member extending forwardly from said handle.

21. (Amended) A low profile hacksaw according to claim [2]1, wherein said blade tensioning device comprises:

a lever pivotally mounted to said handle, said lever providing the second blade mounting structure to which the other opposing end portion of said blade is removably mounted;

a tensioning mechanism constructed and arranged to (a) pivot said lever in a tensioning direction to affect relative movement between said blade mounting structures and

thereby tension said blade and (b) fix said lever with respect to said handle to thereby maintain the tension in said blade.